

What is claimed is:

1. A method of removing a filter cake comprising:
encapsulating a breaker material in a coating comprising a polymer material and a filler material having a specific gravity of at least about 6.5 to create a weighted encapsulated breaker;
placing the weighted encapsulated breaker into a subterranean formation as part of a gravel pack substantially adjacent to a filter cake;
allowing the breaker material to diffuse from the weighted encapsulated breaker; and degrade a portion of the filter cake.
14. The method of claim 1 wherein the breaker material comprises an enzyme, an oxidizer, an organic acid, a chelating agent, or a combination thereof.
3. The method of claim 1 wherein the breaker material comprises hemicellulose, sodium persulfate, ammonium persulfate, citric acid, EDTA, or combinations thereof.
4. The method of claim 1 wherein the polymer material comprises a partially hydrolyzed acrylic material.
5. The method of claim 1 wherein the polymer material comprises a partially hydrolyzed acrylic material crosslinked with an aziridine prepolymer, a partially hydrolyzed acrylic material crosslinked with a carbodiimide, or a combination thereof.
6. The method of claim 1 wherein the coating comprises from about 0.5 weight percent to about 85 weight percent filler material.
7. The method of claim 1 wherein the coating comprises from about 60 weight percent to about 80 weight percent filler material.
8. The method of claim 1 wherein the filler material has a median particle size of from about 1 micron to about 15 microns.
9. The method of claim 1 wherein the filler material has a median particle size of from about 2 micron to about 3 microns.
10. The method of claim 1 wherein the filler material comprises bismuth, tungsten, iron, nickel, tin, or a combination thereof.
11. The method of claim 1 wherein the coating further comprises a crosslinking agent.

12. The method of claim 10 wherein crosslinking agent present in an amount of from about 1.5% to 2.5% by weight of total coating weight.

13. A method of using a portion of a gravel pack to degrade a portion of a filter cake comprising the steps of
- encapsulating a breaker material in a coating comprising a polymer material and a filler material having a specific gravity of at least about 6.5 to create an weighted encapsulated breaker;
 - providing a gravel material and a delivery fluid;
 - slurrying the weighted encapsulated breaker and gravel into a delivery fluid to create a gravel packing composition;
 - introducing the gravel packing composition to a well bore having a filter cake thereon so that a gravel pack comprising weighted encapsulated breaker is formed substantially adjacent to the filter cake; and,
 - allowing the breaker material is diffuse from the encapsulated breaker and degrade a portion of the filter cake.
14. The method of claim 13 wherein the breaker material comprises an enzyme, an oxidizer, an organic acid, a chelating agent, or a combination thereof.
15. The method of claim 13 wherein the breaker material comprises hemicellulose, sodium persulfate, ammonium persulfate, citric acid, EDTA, or combinations thereof.
16. The method of claim 13 wherein the polymer material comprises a partially hydrolyzed acrylic material.
17. The method of claim 13 wherein the polymer material comprises a partially hydrolyzed acrylic material crosslinked with an aziridine prepolymer, a partially hydrolyzed acrylic material crosslinked with a carbodiimide, or a combination thereof.
18. The method of claim 13 wherein the coating comprises from about 0.5 weight percent to about 85 weight percent filler material.
19. The method of claim 13 wherein the coating comprises from about 60 weight percent to about 80 weight percent filler material.
20. The method of claim 13 wherein the filler material has a median particle size of from about 1 micron to about 15 microns.
21. The method of claim 13 wherein the filler material has a median particle size of from about 2 micron to about 3 microns.

22. The method of claim 13 wherein the filler material comprises bismuth, tungsten, iron, nickel, tin, or a combination thereof.

23. The method of claim 13 wherein the coating further comprises a crosslinking agent.

24. The method of claim 23 wherein crosslinking agent present in an amount of from about 1.5% to 2.5% by weight of total coating weight.

25. A method of placing a gravel pack in a subterranean formation comprising the steps of:

providing a gravel pack composition comprising a transport fluid, gravel particles, and a weighted encapsulated breaker material wherein the weighted encapsulated breaker material comprises a breaker material and a coating material comprising a polymer material and a filler material having a specific gravity of at least about 6.5; and,

introducing the gravel pack composition into a well bore so that the gravel particles form a gravel pack substantially adjacent to the well bore.

26. The method of claim 25 wherein the breaker material comprises an enzyme, an oxidizer, an organic acid, a chelating agent, or a combination thereof.

27. The method of claim 25 wherein the breaker material comprises hemicellulose, sodium persulfate, ammonium persulfate, citric acid, EDTA, or combinations thereof.

28. The method of claim 25 wherein the polymer material comprises a partially hydrolyzed acrylic material.

29. The method of claim 25 wherein the polymer material comprises a partially hydrolyzed acrylic material crosslinked with an aziridine prepolymer, a partially hydrolyzed acrylic material crosslinked with a carbodiimide, or a combination thereof.

30. The method of claim 25 wherein the coating comprises from about 0.5 weight percent to about 85 weight percent filler material.

31. The method of claim 25 wherein the coating comprises from about 60 weight percent to about 80 weight percent filler material.

32. The method of claim 25 wherein the filler material has a median particle size of from about 1 micron to about 15 microns.

33. The method of claim 25 wherein the filler material has a median particle size of from about 2 micron to about 3 microns.

34. The method of claim 25 wherein the filler material comprises bismuth, tungsten, iron, nickel, tin, or a combination thereof.

35. The method of claim 25 wherein the coating further comprises a crosslinking agent.

36. The method of claim 35 wherein crosslinking agent present in an amount of from about 1.5% to 2.5% by weight of total coating weight.

37. A weighted encapsulated breaker comprising:
a breaker material; and,
a coating material comprising a polymer material and a filler material having a specific gravity of at least about 6.5.
38. The method of claim 37 wherein the breaker material comprises an enzyme, an oxidizer, an organic acid, a chelating agent, or a combination thereof.
39. The method of claim 37 wherein the breaker material comprises hemicellulose, sodium persulfate, ammonium persulfate, citric acid, EDTA, or combinations thereof.
40. The method of claim 37 wherein the polymer material comprises a partially hydrolyzed acrylic material.
41. The method of claim 37 wherein the polymer material comprises a partially hydrolyzed acrylic material crosslinked with an aziridine prepolymer, a partially hydrolyzed acrylic material crosslinked with a carbodiimide, or a combination thereof.
42. The method of claim 37 wherein the coating comprises from about 0.5 weight percent to about 85 weight percent filler material.
43. The method of claim 37 wherein the coating comprises from about 60 weight percent to about 80 weight percent filler material.
44. The method of claim 37 wherein the filler material has a median particle size of from about 1 micron to about 15 microns.
45. The method of claim 37 wherein the filler material has a median particle size of from about 2 micron to about 3 microns.
46. The method of claim 37 wherein the filler material comprises bismuth, tungsten, iron, nickel, tin, or a combination thereof.
47. The method of claim 37 wherein the coating further comprises a crosslinking agent.
48. The method of claim 47 wherein crosslinking agent present in an amount of from about 1.5% to 2.5% by weight of total coating weight.